MATCHED COMPONENT SPEAKER SYSTEM
ABC6003V / ABC6002V / ABC5002V / ABC4002V

OPERATING INTSTRUCTIONS
PLEASE RETAIN MANUAL FOR FUTURE USE AND REFERENCE

The Audiobahn Way

To bring the product to market that excites the consumer through sound and vision from an orientation of integrity and customer service. We make you look as good as you sound. We strive to take car audio to an extreme the world has never seen, and a world that never stops evolving.

Audiobahn was established in 1997 with one long-term goal in mind, "**Build it Bigger, Badder, & Better, and the people will take notice!"** We back this statement with an engineering team that has brought home several Innovations, Design & Engineering Showcase Awards, and a marketing team from around the world that spends countless hours developing our no compromise products to satisfy the most discriminating enthusiasts.

Our global manufacturing facilities feature ISO9002 ratings (the highest level of quality control awarded in the electronics manufacturing industry), fully robotic assembly lines and a state of the art, California based R & D laboratory.

Due to overwhelming response from our competitors, and our goal to participate in even more events this year, we created *"TEAM AUDIOBAHN." This organization is designed to create a support network along with shirts and perks for team members. "TEAM AUDIOBAHN" is not only for the diehard competitor, but also for anyone that loves car audio as much as we do. With four levels of play, one is right for you to get started in the Audiobahn family.

Our Technical Department and entire staff look to strive above and beyond the rest of the pack by going that extra mile to help you out. Whether you happen to be a veteran competitor, or a beginner car audio enthusiast who does not know a voice coil from a spider. We are all her to help you get the best system you can with what you have.

Judge for yourself, and remember what it's all about, **"If it's not Bigger, Badder & Better, it's not Audiobahn."** If audio is your life, Audiobahn is the brand for you! We make you look as good as you sound. People never stop trying to get the best product, so we will never stop making it.

*To learn more about "TEAM AUDIOBAHN" please give us a call, see our website at website at www.audiobahn.com, or email us at team@audiobahn.com to learn about all the details.

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Getting Started

Welcome to Audiobahn Inc.. This manual has been designed to provide information for the owner, salesperson, and installer. For those of you who want quick information on how to install this product, please turn to the installation section of this manual. Other information can be located by using the table of contents. We at Audiobahn Inc. have worked very hard to make sure that all of the information in this manual is current, but, as we are costantly finding new ways to improve our product, this information is subject to change without notice. All updated information can be found on our web page in the technical support section.

Introduction

Dear Customer,

Congratulations on your purchase of the worlds finest brand of car audio products. Here at Audiobahn Inc. we are devoted to making our musical reproduction the vert best, and we are pleased you have chosen our product. Through years of engineering expertise, hand craftsmanship, and critical testing procedures, we have created a wide range of products that reproduce music with all the clarity and richness you deserve.

For maximum performance we recommend you have your Audiobahn product installed by an Authorized Audiobahn Dealer, as we provide specialized training through our Audiobahn Installer Training Programs. Please read your warranty, keep your receipt, and original carton for possible future use.

To get a free brochure on Audiobahn products in the US call (714) 988-0400 or e-mail us at sales@audiobahn.com.

WARNING

Continuous exposure to sound pressure levels over 100dB may cause permanent hearing loss. High powered autosound systems may produce sound pressure levels well over 135dB. Need we say more! Use common sense.

If after reading this manual you still have questions regarding your product, we recommend that you see your nearest Audiobahn Dealer. A list of Authorized Audiobahn Dealers can be found on our web page. If you need further assistance, feel free to call us at (800) 488-8595 and ask for the Technical Department. Be sure to have the model number, date of purchase, and invoice number available when you call.

The model number can be located on the outside of the carton. Record this in the space provided below along with the date of purchase. It is a good idea to keep your receipt with this as you will need it in the case of needing a warranty, repair service or exchange.

Model Number:_____ Date of Purchase: _____

FEATURES

CARBON HONEYCOMB CONE

BUTYL RUBBER SURROUND

CHROME PLATED CAST ALUMINUM BASKET

2-LAYER HIGH-TRMP ASV VOICE COIL

4 OHM IMPEDANCE

COMPONENT MATHED 18dB PER OCTAVE CROSSOVER NETWORK

25mm SILK DOME TWEETER (SURFACE OR FLUSH MOUNT)

COMPLETE WITH MOUNTING HARDWARE

STRONTIUM MID-WOOFER MAGNET

NEODYNIUM TWEETER MAGNET

SPECIFICATIONS

POWER HANDLING

ABC6003V: 320 RMS POWER
640 ACH POWER
ABC6002V: 200 RMS POWER
400 ACH POWER
ABC5002V: 160 RMS POWER
320 ACH POWER
ABC4002V: 120 RMS POWER
240 ACH POWER

FREQUENCY

ABC6003V: 30Hz - 25kHz
ABC6002V: 30Hz - 25kHz
ABC5002V: 35Hz - 25kHz
ABC4002V: 45Hz - 25kHz

MAGNET WEIGHT

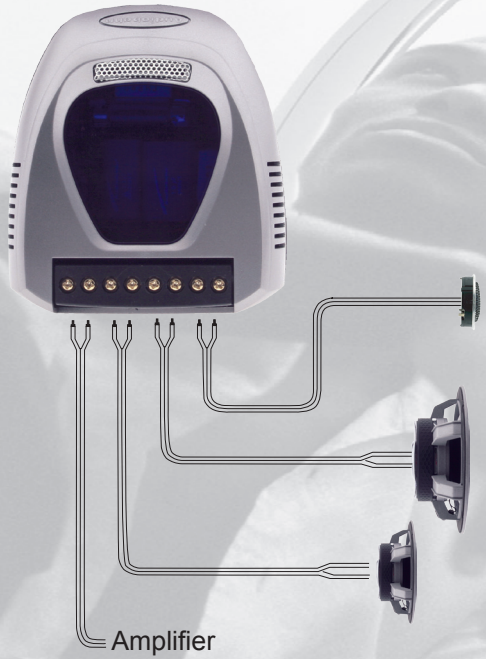
ABC6003V: 20oz.
ABC6002V: 20oz.
ABC5002V: 18oz.
ABC4002V: 18oz.

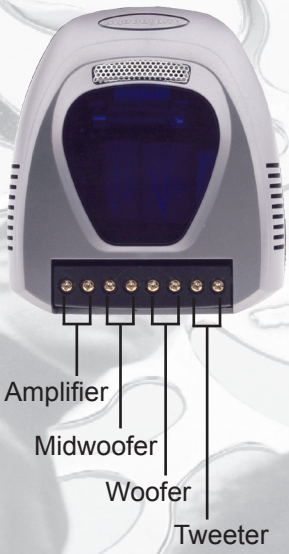
SENSITIVITY

ABC6003V: 91dB
ABC6002V: 91dB
ABC5002V: 90dB
ABC4002V: 89dB

ABC4002V / ABC5002V / ABC6002V

ABC6003V



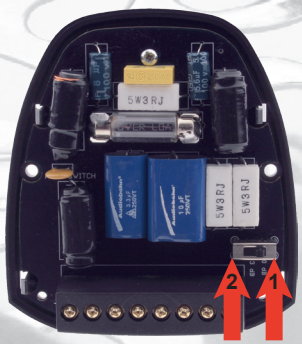


ABC6003V

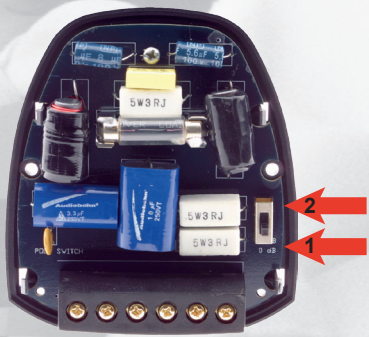
ABC4002V / ABC5002V / ABC6002V

The red arrows above point the separate terminals on the crossover. The left terminal in each set is (-) negative, and the right terminal is (+) positive.

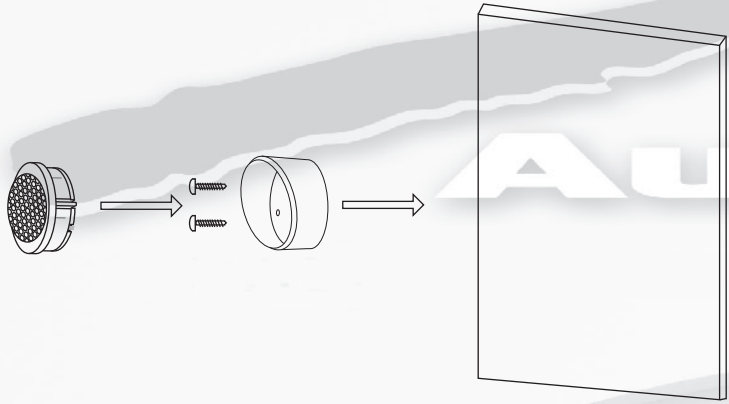
ABC6003V

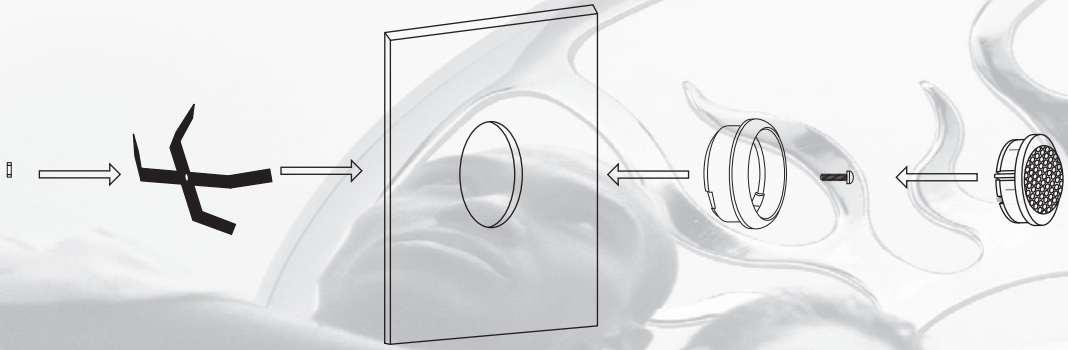


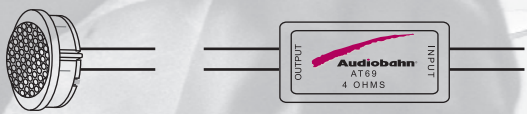
ABC4002V / ABC5002V / ABC6002V



The red arrows in the diagram above (1, 2) point to the tweeter attenuation. Setting the switch to position (1) sets the attenuation to 0dB. Setting the switch to position (2) sets the attenuation to -3dB.

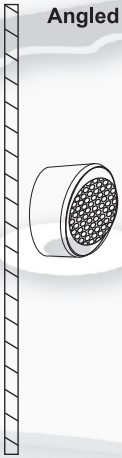





OUTPUT
Audiobahn
AT69
4 OHMS
INPUT

Angled Surface Mount

This will allow you to mount your tweeter on the surface and give you the ability to have the tweeter facing in almost any direction you desire.



1. First find a location that you would like to mount the tweeter
2. Draw a small dot on the location of the tweeter and make sure that both sides are equal
3. Locate the proper position that you would like to mount the tweeter
4. Drill a 3/8" hole for the wire if needed
5. It is recommended to use the two supplied screws to mount the angle piece down due to the vibrations from the vehicle

Flush Mount

This will allow you to mount your tweeter flush with the panel and have the tweeter look like it came from the dealer.

1. First find a location where you would like to mount the tweeter
2. Draw a small dot on the location of each tweeter and make sure that both tweeters are mounted level
3. Remove panel and double check that there is enough room behind the panel for the tweeter (At least 1" depth and 2" diameter)
4. Drill a 2" hole for the supplied flush mount cup
5. Insert the flush mount cup and make sure that it fits in to the hole that you just have drilled
6. Use the supplied hardware to mount the tweeter to the panel to finalized the mounting of the flush mount cup

Wiring the tweeter to the crossover

The crossover will allow the tweeter to play the correct frequencies without sending harmful low frequencies to the tweeter.

1. Make sure that you match the solid blue wire with the solid blue wire (Positive)
2. Make sure that you match the blue with black wire to the blue with black wire (Negative)

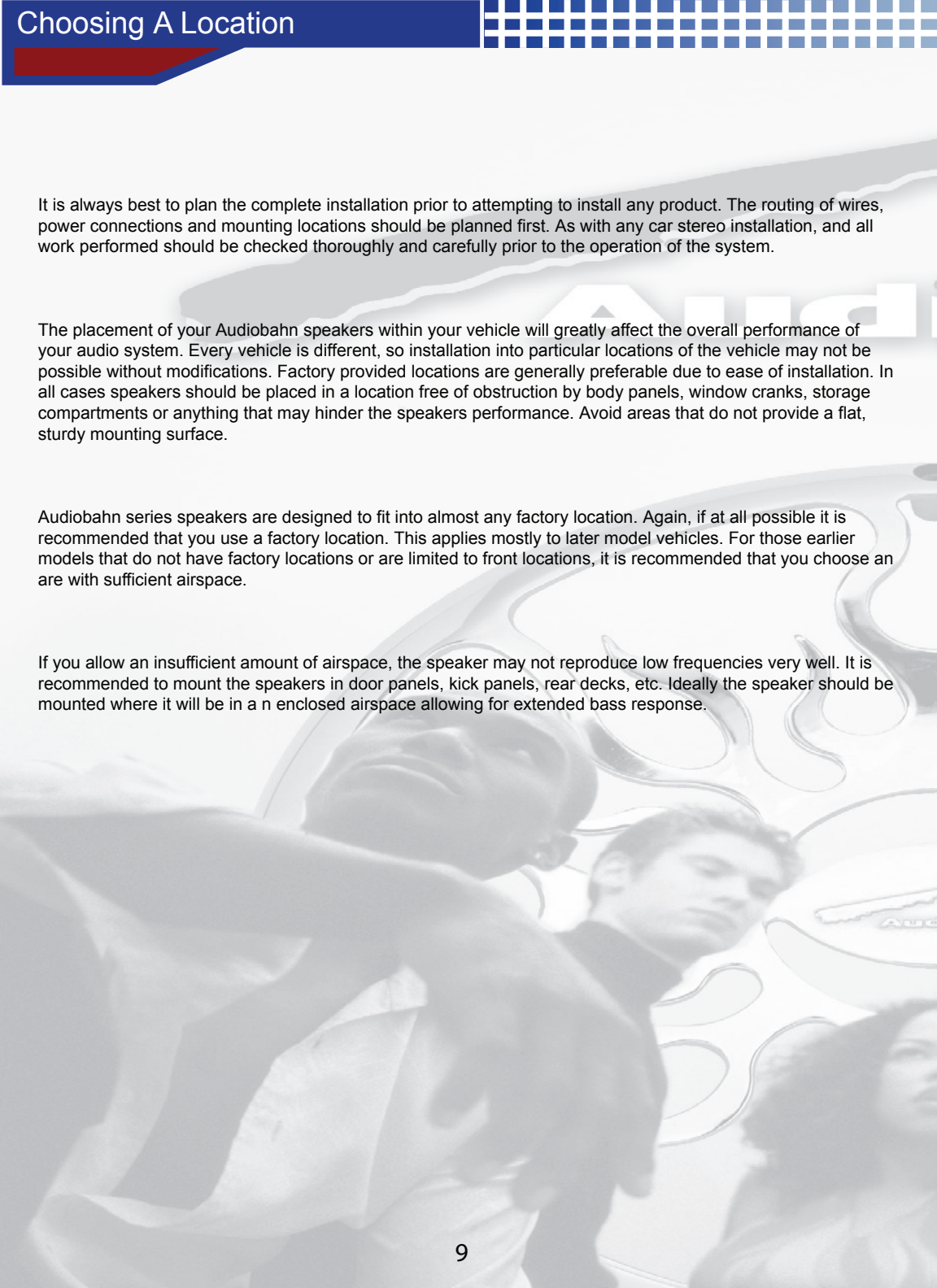
Choosing A Location

It is always best to plan the complete installation prior to attempting to install any product. The routing of wires, power connections and mounting locations should be planned first. As with any car stereo installation, and all work performed should be checked thoroughly and carefully prior to the operation of the system.

The placement of your Audiobahn speakers within your vehicle will greatly affect the overall performance of your audio system. Every vehicle is different, so installation into particular locations of the vehicle may not be possible without modifications. Factory provided locations are generally preferable due to ease of installation. In all cases speakers should be placed in a location free of obstruction by body panels, window cranks, storage compartments or anything that may hinder the speakers performance. Avoid areas that do not provide a flat, sturdy mounting surface.

Audiobahn series speakers are designed to fit into almost any factory location. Again, if at all possible it is recommended that you use a factory location. This applies mostly to later model vehicles. For those earlier models that do not have factory locations or are limited to front locations, it is recommended that you choose an are with sufficient airspace.

If you allow an insufficient amount of airspace, the speaker may not reproduce low frequencies very well. It is recommended to mount the speakers in door panels, kick panels, rear decks, etc. Ideally the speaker should be mounted where it will be in a n enclosed airspace allowing for extended bass response.



Installation

Note: Audiobahn strongly recommends that you operate your system at low volumes prior to the completed installation of your Audiobahn speakers. This will allow a test of the speaker before securing it to its permanent location.

Caution: Make sure that all speaker wiring is fully protected from cuts, tears and possible wear. All short circuits developing as a result could severely damage the source unit or possibly the amplifier as well as the speakers themselves. Makes sure all speaker wires are placed easily within reach of the speaker terminal with no stress on the wire or connectors.

Mounting

1) Confirm the mounting location and depth requirements by inspecting the area where the speaker will be mounted. Most speakers will fit into stock locations on the vehicle. In this case only depth consideration is important.

2) If the location you have picked does require cutting, you may use the supplied template to help you locate and mark the mounting location and cuts to be made. Be careful when cutting out the template. If you cut the template properly, the speaker will be a perfect fit.

3) If there is a cosmetic panel where the speaker will be mounted, we recommend using a utility knife to carefully cut a hole in it. Confirm the cut by placing the speaker in the hole. You may need to modify the hole cut as necessary.

4) If it is necessary to cut steel, reinstall the cosmetic panel in place and use the hole you have previously cut as a template. This will help to insure proper cutting and a good fit. Mark the locations for the speaker mounting screws. Then remove the panel and drill the screw holes. When finished you can replace the panel.

5) After cutting and drilling all holes, inspect the mounting areas for any metal burrs or rough edges. File any area that may interfere with the mounting of the speaker.

6) Clean any metal shavings from the mounting area and check for areas in which water may enter the speaker cavity. Treat the area for water protection when necessary.

Make sure your source unit (Cassette, CD, DAT, DVD etc.) is turned off while connecting the speaker terminals. Turn on the various components and slowly advance the volume. Remember to check and recheck all connections to insure you have a secure fitting.

Wiring

Audiobahn recommends using at least 18-gauge wire with your new speaker system. Thinner gauge wire may easily be severed and can cause damage to your system should any bare wires come in contact with the vehicles chassis.

Makes sure that your audio system is off while installing and connecting your new Audiobahn Speakers. Failure to do so could result in damaging the speaker beyond repair. This is not something that would be covered under the manufacturer warranty.

Be sure to route the wires to the speakers with the insulated terminal ending at the speaker. This will insure a good contact with the speaker. If you need to shorten the speaker lead, do so on the opposite end of the insulated terminals or the bare end.

Be sure the polarity is correct at all times. The speaker leads are color coded for negative and positive. Make sure that the leads connected to the positive terminal of your amplifier or source unit is correctly connected to the positive terminal of the speaker.

To insure long-term reliability all bare wires and wire-to-wire connections should be soldered and insulated with heat shrink or electricians tape. Under no circumstances should you leave any bare wires uncovered, as this can and will lead to the failure of your speakers and possibly other components.

When mounting in a door it is imperative to have the right amount of slack in the connecting wire as to not get crimped or torn when the door is opened or closed. Avoid areas of the door jam that pinch. This will cause damage to the speaker and other components over long-term use.

Once the speaker wiring is complete, you can connect the opposite end to the amplifier or source unit. Again, be sure to observe correct polarity. Solder and wrap all stripped connections.

Securing the Speaker

Once you have tested your system and confirmed that it is operating properly, turn off your system and prepare for the final mounting of the speakers.

1) Position the speaker into the mounting hole and confirm the correct mounting location and hole placement. Screw clips are provided to insure a snug fit. Place crew clips over the metal surface and line up the hole with the hole you have previously drilled. Place the speaker into the hole. Align the mounting holes and proceed to insert the screws. Be sure to tighten the screws evenly as not to warp the speaker frame.

2) Turn your system back on to confirm the speakers proper operation. First test at low volume and then you may steadily increase the volume as desired

In the event that your Audiobahn speakers appear to require service we ask that you first do a little trouble shooting to determine if the problem is actually the speaker, or a problem located in a different part of the vehicle such as the amplifier, wiring, fusing or possibly the source unit.

If your Audiobahn speakers have been installed professionally by an authorized Audiobahn Dealer, we recommend that you return to the dealer and demonstrate the problem to a qualified installer or repair technician.

If you installed the speaker yourself, use the following guidelines to help find the problem.

1) No Sound

- *Check the source or amplifier for power and be sure they are operating properly
- *Check all signal Connections
- *Check for any wiring that may be shorting together or touching the metal chassis
- *Check all ground connections

2) Distorted Sound at All Volumes

- *Check for bad speaker connections
- *Check wiring for correct polarity

3) Distorted Sound at High Volumes Only

- *Check for loose mounting of the speaker
- *Inspect the speaker for debris in the cone or other obstructions
- *Check the woofer cone for any damage or defects

4) Poor Bass Response

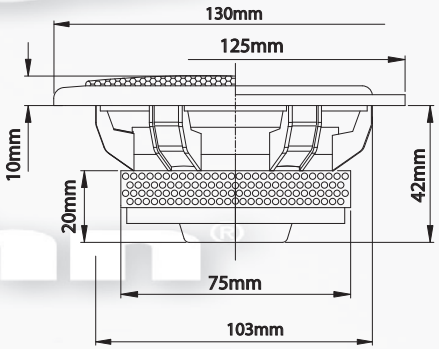
- *Check wiring for correct polarity
- *Check for unstable or loose mounting surface
- *Check bass & treble controls as the source unit or amplifier

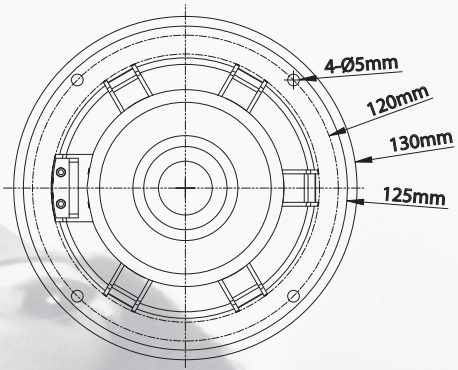
5) Poor High Frequency Response

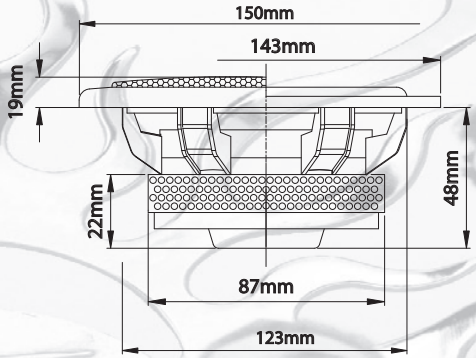
- *Check wiring for correct polarity
- *Check treble control or EQ settings
- *Check the tweeter for possible damage

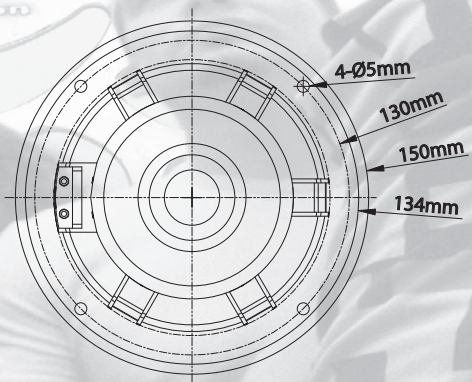
Dimensional Drawings

4 1/2
ABC4002V / ABC6003V



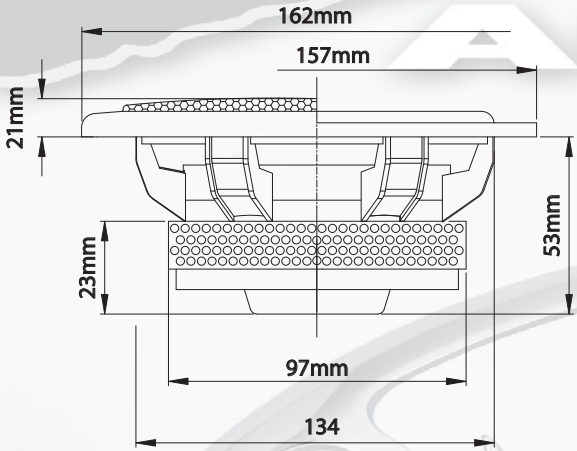


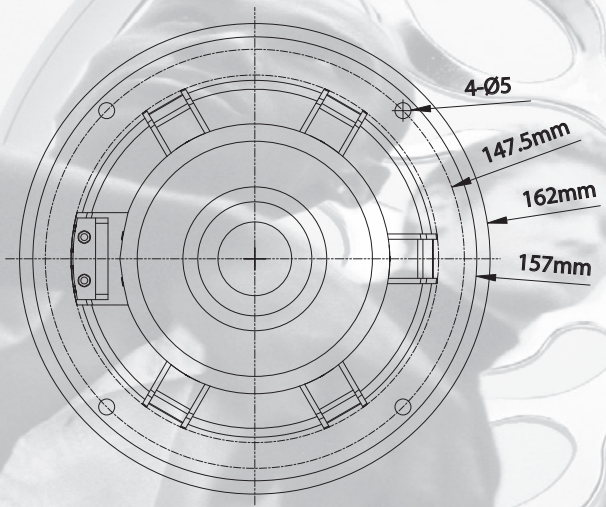




5 1/4”
ABC5002V

6 1/2”
ABC6002V / ABC6003V





Technical Support (800)488-8595 / tech@audiobahn.com

WARNING

Investigate the layout of your automobile thoroughly before drilling or cutting any holes. Take care when you work near gas tanks, gas lines, hydraulic lines, and electrical wiring. Do not use the power amplifier unmounted. Attach the system securely to the automobile to prevent damage, particularly in the event of an accident. Do not mount the system so that the wire connections are unprotected or are subject to pinching or damage from nearby objects.

The +12V DC power wire must be fused at the battery positive terminal connection. Before making or breaking power connections at the system power terminals, disconnect the +12V wire at the battery end. Confirm your radio/head unit and/or other equiptment is turned off while connecting the input jacks and speaker terminals. If you need to replace the power fuse, replace it only with a fuse identical to that supplied with the system. Using a fuse of a different type or rating may result in damage to this system which is not covered by the warranty.

Disclaimer

Specifications are subject to change without notice.
For the most updated Specifications call Audiobahn,
your local Authorized Audiobahn Dealer,
or check the Audiobahn web site.
www.audiobahn.com

Audiobahn Consumer Product Warranty Policy

Audiobahn products are manufactured with the highest quality components and some of the most advanced technology available. Because of this, we recommend that you have your new products installed by an **Authorized Audiobahn Dealer**. **(A list of Authorized Audiobahn Dealers can be found on our web page).**

Warranty Period: One year from the original date of purchase.

Warranty Coverage: This warranty covers manufacturer defects only. The warranty is applicable to the original purchaser, and is non-transferable. You must provide a receipt from an **Authorized Audiobahn Dealer** that shows the location of purchase, price paid, and date of purchase.

(Products purchased by consumers from an **Authorized Audiobahn Dealer** outside the United States are covered only by the Distributor of that specific country and are not covered by **Audiobahn**).

Notes:
Complete subwoofer enclosures (**Audiobahn** will replace defective subwoofers, plexiglass, or neon only. Do not send the entire enclosure, unless the enclosure is defective itself. You must receive prior authorization and an RA# before sending in any complete enclosure).

AUDIOBAHN DOES NOT WARRANTY ANY PRODUCTS NOT PURCHASED THROUGH AN AUTHORIZED DEALER.
(A list of Authorized Audiobahn Dealers can be found on our web page).

AUDIOBAHN WARRANTIES DO NOT COVER THE FOLLOWING:

- Any product not purchased from an **Authorized Audiobahn Dealer** (including Internet dealers)
- Damage caused by abuse, misuse, accident, water / flood, or theft (including any cosmetic damage to the body of the product)
- Damage caused by improper installation
- Any cost or expense related to removal or reinstallation
- Any unauthorized services
- Any product that has the serial number removed, altered, or defaced
- Subsequent damage to any other components
- Pinched, cut, or stripped wires / terminals
- Any product that is new, and/or found to be in working condition
- L.E.D. indicators on electronics (**Audiobahn** will only replace L.E.D.(s) found to be defective at the time of purchase)

How to receive warranty service: Contact your local **Authorized Audiobahn Dealer**, or call **Audiobahn** at **(800) 488-8595** between the hours of 9:00 AM and 5:00 PM PST.

If you are having problems with your system, we recommend you check the product carefully and thoroughly to confirm that the product truly has a manufacturer defect; as opposed to abuse, or other components in the system causing the failure. This might include having an **Authorized Audiobahn Dealer** look at the product to confirm the source of the problem. Any product found to have a manufacturer defect will be replaced with a new piece of the same or similar model, or repaired at the discretion of **Audiobahn**. Any product found to have no manufacturer defect will be returned to the sender at their cost.

You must acquire a Return Authorization Number (#) prior to returning ANY product to Audiobahn. That Return Authorization Number (RA#) must be prominently and clearly marked on the outside of the shipping carton, or product delivery will be refused (no exceptions will be made).

Please note: All shipping and handling (to and from) charges will be the sole responsibility of the consumer.

Please record and keep your Return Authorization Number (RA#) in the event that further communication is required.

Return Authorization Number (RA#): _____

Date product was sent: _____

Contact Information

Audiobahn Headquarters
114 South Berry St.
Brea, CA 92821
Phone (800)488-8595 Fax. (714)988-0433
Pacific Coast Time : 9am-5pm Mon. - Fri.
tech@audiobahn.com